Fort Belknap Indian Community Environmental Department Offices Aquatic Resources Protection Ordinance



Section 1. Introduction

- a. It is important that Aquatic Resources on the Fort Belknap Indian Reservation be protected for the Fort Belknap Indian Community (Gros Ventre & Assiniboine Tribes), its members and descendants.
- b. Any impacts from the unregulated use of Aquatic Resources be prevented or minimized and protection is critical to the preservation of fish and wildlife, the maintenance of water quality, and a strong and vital environment.
- c. An Ordinance authorizing, directing and regulating the protection of Aquatic Resources, the enforcement of necessary and proper regulations for the protection of Aquatic Resources, and the establishment of a permit to regulate projects in and or adjacent to Aquatic Resources.
- d. The Fort Belknap Indian Community, has both the right and the duty to regulate Aquatic Resources on the Reservation based on the various treaties, executive orders and statutes (Winters v. United States, 207 U.S. 564-1908), and pursuant to applicable case law, under which the reservation was established, under article 5 of the Constitution and Bylaws of the Fort Belknap Indian Community of the Fort Belknap Indian Reservation, approved December 13, 1935.
- e. The Fort Belknap Indian Community, under this, "Aquatic Resource Protection Ordinance", will protect isolated wetlands within the exterior boundaries of the Fort Belknap Indian Reservation, which are longer protected under the 404 regulatory rule. Protection of reservation wetlands, are mandatory if they have a hydrological connection to a navigable body of water. If some water flows for sometime from a wetland to a stream, this Aquatic Ordinance may prevent a farmer or developer from dredging or filling in a wetland. Although the rest of the country may no longer protect isolated wetlands in some cases, the Fort Belknap Indian Community, will retain authority to protect isolated wetlands on the Fort Belknap Indian Reservation. The Fort Belknap Indian Community needs this power to regulate land use and to protect the environment.

Section 101: Short Title This Ordinance shall be known and may be cited as "Aquatic Resources Protection Ordinance".

Section 102: <u>Delegation of Policy</u> It is the policy of the Fort Belknap Indian Community that all Aquatic Resources on the Fort Belknap Indian Reservation are to be

protected and preserved, and the degradation of Aquatic Resources be prevented or minimized through the reasonable regulation of such resources.

Section 103: Definitions

<u>"Administrator"</u> Administrative Review Board made up of respective people in the Natural Resource field.

"Aquatic Resources" means all Tribal Waters, whenever located or within a wetland.

"Avoidance" designing a project in such a way as to avoid impacts to wetlands.

"Compensatory Mitigation" to compensate or replace unavoidable wetland losses resulting from permitted projects after all appropriate and practicable avoidance and minimization have been applied. Compensatory mitigation methods include preservation, restoration, enhancement, and creation.

"Council" means the Fort Belknap Community Council.

<u>"Creation"</u> the process of converting an upland site to a functional wetland. This form of mitigation sometimes has a high degree of failure in some complex ecosystems (e.g. estuaries). This approach also has proven to be a workable in some ecosystems (e.g., in prairie wetlands) and should be considered when applicable.

"Enhancement" the process of improving one or more functions or values of the existing wetland. This type of mitigation can be achieved without too much risk of failure. Enhancement probably does not contribute to the "no net loss" goal because the area to be enhanced is most likely already in wetland status. An example of an acceptable form of enhancement could include fencing degraded wetlands to prelude further damage from livestock and thus enable recovery.

"Grinnell Lands" or "Grinnell Agreement", an agreement to sell land to the United States from the Fort Belknap Reservation, located in the Little Rocky Mountains, signed on October 9, 1895 (29 Stat., 350).

SWANNC Decision. In January 2001, the United States Supreme Court in Solid Waste Agency of Northern Cook County v. Army Corps of Engineers, known as SWANCC, invalidated the Corps' Migratory Bird Rule which the Corps had been using to assert authority over isolated, intrastate wetlands. In SWANCC, the Corps attempted to regulate activities taking place in ponds which had formed in pits originally used in a sand and gravel mining operation. Under Corps regulations, the definition of "waters of the United States" included waters "which are or could be used as habitat by birds protected by the Migratory Bird Treaty" or by other migratory birds crossing state lines. Migratory birds could potentially use the gravel pits in question in SWANCC, but the ponds were not adjacent to a navigable water or tributary. The Supreme Court ruled that the Corps' attempt to regulate such isolated waters exceeded their authority under the

Clean Water Act. By enacting this ruling, isolated wetlands can no longer be protected by the Army Corps of Engineers.

<u>"Sub-marginal Land"</u> Original land returned to the Fort Belknap Indian Community adjacent to the southwest lands of the Fort Belknap Reservation, as identified by an act of congress or otherwise designated tribal lands.

"Mean Annual High Water Mark" means that line on the shore of Tribal Waters established by the fluctuations of water and indicated by physical characteristics such as clear, naturally occurring line impressed on the bank; shelving changes in the character of soil, paucity or lack of terrestrial vegetation; or the presence of water borne litter or debris.

<u>"Minimization"</u> implementation of appropriate and practicable steps to minimize the adverse impacts to wetlands through project modifications and permit conditions.

<u>"Person"</u> means any individual, trust firm, joint stock company, federal agency, corporation (including a government corporation), association, state, municipality, commission, political subdivision of a state or any interstate body.

<u>"Preservation"</u> the process of ensuring perpetual existence of wetland functions. An acceptable form of preservation would be preserving an exiting unique wetland. Preservation will not contribute to the "no net loss" goal because the area being preserved is already in wetland status.

<u>"Project"</u> means any physical alteration of Aquatic Resources, or any activity affecting Aquatic Resources in this Ordinance, including but not limited to dredging, filling, unregulated access detrimental to such lands, irrigation diversions and returns, drainage ditches and construction on or adjoining Aquatic Resources, and the maintenance or repair involving any of the above activities.

"Restoration" the process of returning a disturbed or totally altered site to functional wetland status. The focus often is restoration of the hydrology and original plant community to the extent practicable. In most situations, this form of compensation yields the greatest benefit with the least amount of risk.

"Riparian lands" means lands above the mean annual high water mark that are adjacent to Tribal Waters, where terrestrial vegetation is or would be strongly influenced by the presence of water, which are critical for groundwater recharge or as habitat for wildlife.

"Tribal Waters" means;

1. All bodies of water included in land purchases, exchanges, that are in sole possession and property of the Fort Belknap Indian Community, including any returns of the "Grinnell Lands", signed October 9, 1895 29 Stat., 350 and "sub-marginal lands"

- 2. all naturally occurring bodies of water within the exterior boundaries of the Reservation regardless of alteration by man, including but not limited to lakes, rivers, streams, (including intermittent streams), mudflats, wetlands, springs, sloughs, potholes and ponds, and any bodies of water classifiable as "waters of the United States" under federal law.
- 3. tributaries of waters identified in subpart 1. above; and
- 4. wetlands.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include but are not limited to mudflats, seeps, swamps, marshes, bogs, potholes and other similar areas.

5. Isolated Wetlands.

<u>"Isolated Wetlands"</u> means those areas that have no hydrological connection to "waters of the United States" (identified in subpart 2. above), that have functions and values relative to the health conditions of their immediate environment.

Section 104: The Fort Belknap Community Council shall be responsible for the administration and management of this Ordinance and compliance with the rules and regulations authorized in Section 106.

Section 105: <u>Powers and Duties of the Fort Belknap Community Council.</u> The Council has the full power and authority to carry out and administer the provisions of this Ordinance. The Council shall have jurisdiction and authority over all persons and property, tribal, institutional and private, necessary to lawfully enforce the provisions of this Ordinance.

Section 106: <u>Promulgate Rules and Regulations</u> Pursuant to the purposes of the Ordinance, the Council shall promulgate such rules and regulations as are necessary and feasible for the protection of Aquatic Resources. The rules and regulations shall be a part of the Ordinance and shall have the full force and effect of law.

Section 107: <u>Delegation of Authority</u> The Council shall delegate administrative and enforcement authority to carry out the provisions of this Ordinance to the Administrative Review Board.

Section 201: Permit Application Requirements

Any person who intends to undertake a project that may affect any aquatic lands or riparian lands shall apply for a permit for the project with the Environmental Protection

Office. The application shall be on a form provided by the department and shall include, but is not limited to:

- (a.) A specific description of the proposed project and the purpose and need for the project (Construction Mitigation Plan).
- (b.) No work may commence on a project until a permit has been issued to the owner of the project, after all alternative methods were reviewed and examined.
- (c.) A description of how the project will avoid adverse impacts on aquatic vegetation, aquatic life, wildlife, and Water Quality.
- (d.) The permit shall authorize construction of the project in accordance with the terms and conditions of the project permit, including a plan that lays out the project activities, materials, access to project area, and length of time.
- (e.) A contractor shall not commence any construction activities until the owner provides the permit to the contractor. The permit shall be prominently displayed at the project site for the duration of construction activities.

The administrator may require such additional information as may be necessary to evaluate the application.

Section 202: <u>Permit Fees</u> An application for a permit shall be accompanied by payment of a non-refundable fee to cover costs associated with permit issuance and administration. The amount of the fee shall be fixed from time to time by regulation, shall take into account the scope of the proposal and whether the applicant is a profit making entity, and shall be reasonable.

Section 203: Permit Application Review Process

- (a.) The Administrator shall review an application for a permit for adequacy and for project technical feasibility. The Administrator shall also assess the impacts of the project on Tribal waters and riparian lands.
- (b.) In reviewing project technical feasibility and assessing the impacts of the project on Aquatic Resources and riparian lands, the Administrator shall call a team together within 15 days of receipt of the application for an on-site inspection. Members of the team shall include, but not be limited to, representatives of the Fort Belknap Environmental Department Programs, the Tribal Fish and Game Program, the Planning Department, the Tribal Water Resources Program, and the Tribal Natural Resources (Land) Department.
- (c.) The administrator may, if it is deemed appropriate, grant, deny, or identify additional action needed before a permit will be granted. If additional action is needed, a time frame for completion of these items shall be set forth. If not completed within said time frame, the permit application shall be deemed denied. If additional action is necessary, the Administrator must verify completion before a permit is granted. The Administrator shall notify the applicant in writing of the decision within 45 days of the date of the

application, or such earlier time as a decision is made. The notice shall include any conditions on the permit, if granted, and any time limits on the permit.

(d.) If the applicant decides to proceed with the project, the applicant shall notify the Administrator.

Section 204: Standards for Advisement of Permit Application

- (a.) The Administrator shall take under advisement the following matters in consultation with scientific and technical staff in evaluating the adequacy and feasibility of all projects:
 - (1) whether all construction activities shall be accomplished in such a manner as to minimize or preclude adverse impacts on the environment and ecosystem;
 - (2) if the application is for a permanent structure, whether it will be designed and constructed in such a manner as to assure permanence; and
 - (3) whether the project will pass reasonably anticipated water flows, currents, or fluctuations in surface elevation without creating erosional situations upstream, downstream or on the project location.
- (b.) The Administrator shall take under advisement, in consultation with scientific and technical staff, how to obtain the following matters in evaluating impacts on fish, aquatic animals, wildlife and plants:
 - (1) the impacts of any dredge or fill activities on Aquatic Resources;
 - (2) the impacts of construction on Aquatic Resources and riparian lands;
 - (3) changes to, or creation of flow patterns, currents, turbidity and volume of Aquatic Resources resulting from the proposed project, including whether Tribal Waters will be de-watered; and
 - (4) the disruption of life cycles, seasonal uses, and populations of fish, aquatic animals, wildlife, and plant life existent on or in or dependent on Aquatic Resources or riparian lands.

Section 301: Construction Requirements

The ensuing construction requirements will apply in advancement of this Ordinance.

(a.) Wetlands and isolated wetlands, shall not be filled, dredged, drained or otherwise impacted unless no feasible alternative exists and such action, after consideration of all relevant factors, is necessary for the completion of a

- project that has been determined by the Administrator to satisfy all other requirements of these regulations.
- (b.) No construction equipment shall be operated below the existing water surface without specific authorization contained in a permit.
- (c.) All temporary methods of ingress and egress, crossings, bridge supports, culverts or other structures that will be needed during the period of construction shall be designed to satisfactorily pass and withstand high water conditions and to minimize or preclude siltation, turbidity and the introduction or reactivation of pollutants or toxic substances into Tribal Waters. All such temporary structures shall be removed upon conclusion of construction and the affected areas shall be restored to their pre-construction condition, subject to any conditions placed upon restoration during the permitting process.
- (d.) All technically feasible steps shall be taken to minimize or preclude removal, relocation, siltation, or other adverse impacts to Aquatic Resources and riparian lands.
- (e.) Heavy equipment used in construction of projection when occurring in or on wetlands, shall not cause any permanent damage, and all measures necessary for reclamation measures shall be utilized.
- (f.) Construction of roads, bridges, culverts, and similar methods of crossing or channeling Tribal Waters and Aquatic Resources, shall be designed and constructed in such a manner as to allow free and unrestricted passage of flowing waters and to accommodate and interfere the least with any current or bed load patterns or erosions and depositional characteristics of Tribal Waters at or near the project location. Such structures will be designed and constructed so as to cause the least change in sediment load and turbidity of Tribal Waters and to minimize or preclude adverse impacts to Aquatic Resources and riparian lands.
- (g.) Rip-rap of banks and shorelines will be allowed upon a showing of no or minimal impact to Tribal Waters, Aquatic Resources, and riparian lands due to changes in velocity, sediment load, current and wave pattern or channel readjustment, and then only as a last alternative solution to resolve the matter the proposed project has been formulated to address.
- (h.) Diversions to obtain water for agricultural purposes shall be designed and constructed in such as to minimize or preclude adverse impacts to Aquatic Resources and riparian lands. Diversions shall also be constructed in such a manner as to minimize or preclude loss of fish from the source waters, and preclude de-watering of the stream. Diversions may involve, depending upon technical feasibility, screening of open diversions, construction of a return flow structure of sufficient quality to provide an avenue for fish that enter an

- open diversion to return to the source water in a healthy condition, or pumping in lieu of open diversions.
- (i.) Use of explosives on or near Tribal Waters or Aquatic Resources shall be evaluated on a case by case basis and shall take into account alternatives to blasting, the impact upon resident fish, wildlife or plant, and any special seasonal requirements such as spawning or nesting.
- (j.) Creation of impoundments may be permitted if the impacts to flora and fauna, Tribal Waters, Aquatic Resources, and riparian lands is otherwise acceptable under this Ordinance and such impoundment is the only technically method to achieve the purposes of the project.
- (k.) Scientific devices such as staff gauges, recording devices and fish weirs will necessitate application to the Administrative Review Board prior to commencing placement.
- (l.) Pipelines and other similar structures either buried or placed above ground shall be constructed in such a manner as to preclude the potential for leakage of the transported substance into or on Tribal Waters, Aquatic Resources, and riparian lands and shall be built to incorporate the highest degree of technologically available safety and environmental standards.
- (m.) Power lines, utility lines, guy lines and similar structures shall be located so as to incorporate the most direct and fewest number of crossings over or under Tribal Waters, Aquatic Resources, and riparian lands in order to minimize or preclude interference or other disturbance or destruction of flyways for avian species and to minimize or preclude the potential for adverse impacts upon the natural, scenic, and aesthetic values of Tribal Waters, Aquatic Resources, and riparian lands.
- (n.) Docks, weirs, breakwaters, jetties and other similar structures shall be constructed in such a manner as to minimize or preclude interference with navigation, fish, aquatic animals, wildlife and plant life cycles and habitat, natural and scenic values, existent water flow patterns and sediment loads, public health, and property interests.

Section 302: Wetland Mitigation Criteria

The purpose of this section is to establish a policy for wetland mitigation occurring within the exterior boundaries of the Fort Belknap Indian Reservation. Mitigation may be required for unavoidable impacts to wetlands and isolated wetlands, associated with projects permitted under the Tribal Aquatic Resources Protection Ordinance (ARPO).

The Council on Environmental Quality (CEQ) defines mitigation at to include: avoiding impacts, minimizing impacts, reducing impacts over time, and compensating for impacts (40 CFR 1508.20).

Another purpose of this section is to provide a means for the Fort Belknap Indian Community to contribute to the nationwide goal of "No Net Loss" of wetlands.

- (a) <u>Sequencing:</u> The 1990 Memorandum of Agreement between the Department of the Army (Corps of Engineers) and EPA regarding mitigation 404 permits requires an application of sequence of wetland mitigation in the following order:
 - 1. Avoidance
 - 2. Minimization
 - 3. Compensation
- (b) <u>404 permits</u>: The permits are the backbone for wetlands protection, Federal Wetland Policies and Nationwide Permits will be honored if mitigation is needed on tribal wetlands-a copy of the EA/EIS thru section 404 (b)(1) will be attached to the tribal permit.

The same order of sequencing will be required on wetland mitigation as is required for projects permitted under the Tribal Waters Protection Ordinance.

(c) <u>Mitigation Ratios</u>: Wetland mitigation ratios are generally expressed in acreage of compensatory replacement required to make up for acreage of lost wetlands from permitted projects.

Compensation ratios greater than one to one are preferred because of the fact that created wetlands generally provide fewer wetland functions over time on a per acre basis than the original wetland (King et al, 1993). Preservation and enhancement do not create any additional acres; therefore compensation ratios will be greater than 1:1, also. The following ratios shall be the minimum replacement wetland ratios for permitted projects occurring within the Fort Belknap Indian Reservation.

CREATION	pre-project post project	=	1.5:1 2.0:1
RESTORATION	pre-project post project	= =	1.1:1 1.5:1
<u>ENHANCEMENT</u>	pre-project post-project	=	3:1 4:1

The above ratios are consistent with the U.S. Forest Service Region 6 recommended minimum replacement wetland ratios.

(d) <u>Preservation:</u> Preservation may be an acceptable option for compensatory mitigation occurring on the Fort Belknap Indian Reservation. Although this form of mitigation does not replace actual wetland acreage impacted by permitted projects, it can be used to preserve high quality or unique wetlands that may be threatened with impacts. Preservation is best used in combination with restoration or enhancement in order to create habitat diversity. It is important to include upland habitat with preservation efforts. The U.S. Fish

and Wildlife Service recommends a minimum ratio of uplands to wetlands of 4:1 for optimal water-bird production.

(e) <u>Site Selection:</u> All compensatory mitigation that is required for permitted projects occurring on the Fort Belknap Indian Reservation shall be placed within the exterior boundaries of the Reservation.

On-site/in-kind compensatory mitigation is the preferred approach for projects occurring on the Fort Belknap Indian Reservation. This refers to locating mitigation sites adjacent to the impacted site and the replacement wetland should be of the same type that was impacted. Also, the replacement wetland should provide the same functions as the impacted site.

In the event on-site mitigation is not a practical option because of public safety issues or threats of human impacts, off-site/in-kind compensatory mitigation may be applied. This refers to locating mitigation away from the impacted site; however, the replacement wetland should be of the same type that was impacted. It is also preferred that the replacement wetland be located in the same watershed as the impacted site. Also, the replacement wetland should provide the same functions as the impacted site.

In the event in-kind compensatory mitigation is not practical, out of kind mitigation may be applied. This refers to the replacement wetland not of the same type as the impacted site. On-site locations should be considered before off-site locations are chosen.

Mitigation site locations should have a permanent water supply to ensure proper wetland hydrology. Hydrophytic vegetation should be collected from the impacted site and transplanted to the replacement site, if practical. The substrate of the replacement site should be sufficient enough to result in the site to be inundated or saturated long enough during the growing season to develop anaerobic conditions.

(f) <u>Monitoring:</u> Mitigation sites shall be monitored to evaluate the success of the project. Sites are to be monitored for a minimum of 5 years in order to insure successful replacement of impacted sites. If it becomes apparent that the replacement project site is not successful within the 5 year monitoring period, the project owner will implement corrective measures.

Reference sites should be used to evaluate the success of the replacement site. Reference sites should be a natural occurring healthy wetland of the same type as the replacement type. The replacement site should be monitored by functional and biological assessments in order to determine if it provides the same functions as the reference site.

Section 401: <u>Gros Ventre & Assiniboine Tribes of Fort Belknap Indian Community</u> Best Management Practices for Forestry in the Little Rocky Mountains

The Fort Belknap Indian Community Council has developed a Forestry Management Plan that was implemented in 1983 by **Resolution No. 34-83**. To add to the present management plan would clearly define more innovative methods of forestry management practices.

I. <u>DEFINITIONS</u>

- 1. "Hazardous substance" means a material which by its nature is toxic, dangerous to handle or dispose of, or a potential environmental contaminant, and includes petroleum products, pesticides, herbicides, chemicals, and biological wastes.
- 2. "Streams" means a natural watercourse of perceptible extent with defined beds and banks, which confine and conduct continuously or intermittently flowing water. Definite beds are defined as having a sandy or rocky bottom, which results from the scouring of water flow.
- 3. "Streamside Management Zone (SMZ)" means the stream itself and the adjacent area of varying width where management practices that might affect water quality, fish, or other aquatic resources are modified. The SMZ is not a zone of exclusion but a zone of closely managed activity. The SMZ acts as an effective filter and absorptive zone for sediment; maintains shade; conserves aquatic and terrestrial riparian habitats; protects the stream channel and banks; and promotes floodplain stability.

II. ROADS

A. PLANNING AND LOCATION

- 1. Minimize the number of roads constructed in a watershed through comprehensive road planning, recognizing intermingled ownership and foreseeable future uses. Use existing roads where practical, unless use of such roads would cause or aggravate an erosion problem.
- 2. Review available information and consult with professionals as necessary to help identify erodible soils and unstable areas, and to locate appropriate road surface materials.
- 3. Fit the road to the topography by locating roads on natural benches, and following natural contours. Avoid long, steep road grades and narrow canyons.
- 4. Locate roads on stable geology, including well-drained soils and rock formations that tend to dip into the slope. Avoid slumps and slide-prone areas characterized by steep slopes, highly weathered bedrock, clay beds, concave slopes, hummocky topography, and rock layers that dip parallel to the slope. Avoid wet areas, including moisture-laden or unstable toe slopes, marshes, fens, wet meadows, and natural drainage channels.

- 5. Locate roads a safe distance from streams when roads are running parallel to stream channel. Provide an adequate SZM to trap sediment and prevent its entry into the stream.
- 6. Minimize the number of stream crossing and choose stable stream crossing sites.
- 7. Locate roads to provide access to suitable (relatively flat and well-drained) low landing areas to reduce soil disturbance.

B. DESIGNS

- 1. Properly design roads and drainage facilities to prevent potential water quality problems from road construction.
- 2. Design roads to the minimum standard necessary to accommodate anticipate use and equipment. The need for higher standard roads can be alleviated through better road-use management.
- 3. Design roads to balance cuts and fills or use full bench construction (no fill slope) where stable fill construction is not possible.
- 4. Design roads for minimal disruption of drainage patterns. Vary road grades to reduce concentrated flow in road drainage ditches, culverts, and on fill slopes and road surfaces.
- 5. Design stream-crossing for adequate passage of fish (if present), minimum impact on water quality.

C. DRAINAGE FROM ROAD SURFACE

- 1. Provide adequate drainage from the surface of all permanent and temporary roads by using out-sloped or crowned roads, drain dips, or in-sloped roads with ditches and crossdrains. Space road drainage features so peak drainage flow on the road surface or in the ditches will not exceed the capacity of the individual drainage facilities.
 - a. Out-sloped roads provide means of dispersing water in a low-energy flow from the road surface. Out-sloped roads are appropriate when fill slopes are stable, drainage will not flow directly into the stream channels, and transportation safety considerations can be met.
 - b. For in-sloped roads, plan ditch gradients steep enough, generally greater that 2%, but less than 8%, to prevent erosion. The higher gradients may be suitable for more stable soils; use the lower suitable gradients for less stable soils.
 - c. Proper constructed drain dips can be an economical method of channeling surface flow off the road. Construct drain dips deep enough into the subgrade so the traffic will not obliterate them.
- 2. Skew ditch relief culverts 20 to 30 degrees toward the inflow from the ditch to improve inlet efficiency. Protect the upstream end of cross drain culverts from plugging.

- 3. Where possible, install ditch relief culverts at the gradient of the original ground slope; otherwise armor outlets with rock or anchor downspouts to carry water safety across the fill slope.
- 4. Provide energy dissipators (rock piles, logs, etc.) where necessary at the downstream end of ditch relief culverts to reduce the erosion energy of the emerging water. Crossdrains, culverts, water bars, dips, and other drainage structures should not discharge onto erodible soils or fill slopes without outfall protection.
- 3. Prevent downslope movement of sediment by using sediment catch basins, drop inlets, changes in road grade, headwalls, or recessed cut slopes.
- 4. Route road drainage through SMZ, filtration fields, or other sediment-settling structures. Install road drainage features above stream crossing to route discharge into filtration zones before entering a stream.

D. CONSTRUCTION

- 1. Keep slope stabilization, erosion and sediment control work as current as possible with road construction. This includes installing drainage features as part of the construction process. Complete or stabilize road sections within the same operation season, ensuring that drainage structures are fully functional prior to spring or fall runoff and that major road sections are not left in an unstable condition over winter.
- 2. Stabilize erodible, exposed soils by seeding, compacting, rip-rapping, benching, mulching, or other suitable means prior to fall or spring runoff.
- 3. At the toe of potentially erodible fill slopes, particularly near stream channels, pile slash in a row parallel to the road to trap sediment. When done concurrently with road construction, this practice can effectively control sediment movement and can provide an economical way of disposing of roadway slash. Limit the height, width and length of these "slash filter windrows" so not to impede wildlife movement.
- 4. Minimize earth-moving activities when soils appear excessively wet. Do not disturb roadside vegetation more than necessary to maintain slope stability and to serve traffic needs.
- 5. Construct cut and fill slopes at stable angles.
- 6. Avoid incorporating potentially unstable woody debris in the fill portion of the road prism. Where possible, leave existing rooting trees or shrubs at the toe of the fill slope to stabilize the fill.
- 5. Consider road surfacing to minimize erosion.

- 6. Place debris, overburden, and other waste materials associated with construction and maintenance activities in a location to avoid entry into streams. Include these waste areas in soils stabilization planning for the road.
- 7. Minimize sediment production from borrow pits and gravel sources through proper location, development and reclamation.
- 8. When using existing roads, reconstruct only to the extent necessary to provide adequate drainage and safety; avoid disturbing stable road surface.

E. MAINTENANCE

- 1. Grade road surface only as necessary to maintain a stable running surface and to retain the original surface drainage.
- 2. Maintain erosion control features through periodic inspection and maintenance, including cleaning dips and cross-drains, repairing ditches, marking culverts inlets to aid in location, and cleaning debris from culverts.
- 3. Avoid cutting the toe of cut slopes when grading roads or pulling ditches.
- 4. When plowing snow for winter timber harvest, provide breaks in snow berm to allow road drainage.
- 5. Haul all excess material removed by maintenance operations to safe disposal sites and stabilize these sites to prevent erosion. Avoid side-casting material into stream or locations where erosion will carry material into a stream.
- 6. Avoid using road during wet periods if such use would likely damage the road into a stream.
- 7. Upon completion of seasonal operations, the road surface should be crowned, out-sloped, in-sloped, or water-barred. Remove berms from the outside edge where runoffs channeled
- 8. Leave abandoned roads in a condition that provides adequate drainage without further maintenance. Close these roads to traffic; reseed and/or scarify; and. If necessary, re-contour and provide water bars or drain dips.

III. TIMBER HARVESTING, STREAMSIDE MANAGEMENT AND SITE PREPARATION

- 1. Plan timber harvest in consideration of your management objectives and the following:
 - a. Soils and erosion hazard identification.
 - b. Rainfall.

- c. Topography.
- d. Silvicultural objectives.
- e. Critical components (aspect, water courses, landforms, etc.)
- f. Habitat types.
- g. Potential effects on water quality and beneficial water uses.
- h. Watershed condition and cumulative effects of multiple timber management activities on water yield and sediment production.
- i. Wildlife habitat.
- 2. Use the logging system that best fits the topography, soil type, and season, while minimizing soil disturbance and economically accomplishing silvicultural objectives.
- 3. Use the economically feasible yarding system that will minimize road densities.
- 4. Design and locate skid trails and skidding operations to minimize soil disturbance. Using designated skid trails is one mean of limiting site disturbance and soil compaction. Consider the potential for erosion and possible alternative yarding system prior to planning tractor skidding on steep or unstable slopes.
- 5. Locate skid trails to avoid concentrating runoff and provide breaks in grade. Locate skid trails and landing away from natural drainage systems and divert runoff to stable areas. Limit the grade or constructed skid trials on geologically unstable, saturated, highly erosion. Or easily compacted soils to a maximum of 30%. Use mitigating measures, such as water bars and grass seeding, to reduce erosion on skid trails.
- 6. Minimize the size and number of landings to accommodate safe, economical operation. Avoid locating landings that require skidding across drainage bottoms.

B. STREAMSIDE MANAGEMENT

1. Designate SMZs to provide stream shading, soil stabilization, sediment and water filtering effects, and wildlife habitat. The SMZ encompasses a strip at least 25 feet wide on each side of a stream, measured from the ordinary highwater mark or definable bank. The width of the SMZ extends beyond the 25-foot minimum to include wetlands along the stream bottom and to provide additional protection in areas of steep slopes or erosive soils. "Stream" means a natural water course of perceptible extent with definite beds or banks which confine and conduct continuously or intermittently flowing water. Definite beds are defined as having a sandy or rocky bottom which results from the scouring action of water flow. Consult with forestry professionals, soil and water conservation specialists, or biologists if assistance is needed in setting appropriate SMZ boundaries.

- 2. Consider the following practices when harvesting timber in the streamside management zone.
 - a. Retain hardwood trees, sub-merchantable conifers, and shrubs adjacent to the stream.
 - b. Retain trees necessary for bank stabilization and as a future source of large woody debris to the stream channel. In the proper locations, large woody debris in the stream channel helps to dissipate stream energy, stabilize banks, and form pools that trap sediment and provide essential fish habitat.
 - c. When clear-cutting up to the stream edge, consider the length of the stream channel opened to the sun. Where possible, keep continuous opening under 600 feet of stream length. This helps to prevent increased in the water temperature and promotes wildlife habitat diversity.
 - d. Recognize that in some soil and drainage types, clear-cutting can cause marked increases in the water table, cold-air ponding, and grass/shrub competition. All of these factors can inhibit conifer regeneration. To ensure conifer reestablishment, some mature trees may need to be left on site.
 - e. Maintain or provide sufficient ground cover to trap sediment. Hand-scalping and planting may be preferable to machine scarification or burning within SMZ. Whole-tree or tree-length yarding can reduce the need for slash disposal in the SMZ.
 - f. Steep slopes containing material that could roll downslope and fall into a stream during burning should receive special attention. Trees logged along streams can be high-stumped to help prevent this debris buildup in streams. A slash-free zone may be necessary to maintain streamside vegetation if site preparation will involve burning on steep ground adjacent to the SMZ.
- 3. Minimize operation of wheeled or tracked equipment within the SMZ, and avoid equipment operation in wetlands, except when the ground is frozen (see Section IV on winter logging). Do not operate equipment on stream banks.
- 4. Use directional falling for harvest operations in the SMZ or wetlands. Avoid falling trees or leaving slash in streams or water bodies. Limb or top trees above the high-water mark.
- 5. Suspend the lead end of the log during skidding whenever possible, and use cables to end-line logs out of SMZs and wetlands when ground skidding systems are employed. Logs should be fully suspended when skyline skidding across a stream and immediately above streambanks. Ground skidding through any perennial stream requires a 310 permit. (see Section III on stream crossings.)
- 6. Avoid decking logs within the ordinary high-water mark of any stream.

C. OTHER HARVESTING ACTIVITIES

- 1. Tractor skid when compaction, displacement, and erosion will be minimized. Avoid tractor or wheeled skidding on unstabled, wet, or easily compacted soils and on slopes that will exceed 40% unless operation can be conducted without causing excessive erosion. Avoid skidding with the blade lowered.
- 2. For each landing, skid trail, or fire trail, provide and maintain a drainage system to control the dispersal of water and to prevent sediment from entering stream
- 3. Install necessary water bars on tractor skid trails, appropriate spacing between bars is determined by the soil type and slope of the skid trails. Timely implementation is important.
- 4. When natural revegetation is inadequate to prevent accelerated erosion before the next growing season, apply seed or construct water bars on skid trails. Landing and fire trails. A light ground cover of slash or mulch will retard erosion.

D. SLASH TREATMENT AND SITE PREPARATION

- 1. Rapid reforestation of harvested areas is encouraged to re-established protection vegetation.
- 2. Use brush blades on dozers when piling slash. Avoid use of dozers with angle blades. Site preparation equipment producing irregular surfaces is preferred. Care should be taken to preserve the surface soil horizon.
- 3. Minimize or eliminate elongated exposure of soils up and down the slope during mechanical scarification.
- 4. Scarify the soil only to the extent necessary to meet the reforestation objective of the site. Low slash and small brush should be left to slow surface runoff, return soil nutrient, and provide shade for seedlings.
- 5. Carry out brush piling and scarification when soils are frozen or dry enough to minimize compaction and displacement.
- 6. Carry out scarification on steep slopes in a manner that minimizes erosion. Broadcast burning and/or herbicide application is the preferred means for site preparation, especially on slopes greater than 40%.
- 7. Stabilize or reclaim landings and temporary roads on completion of use.
- 8. Remove all logging machinery debris and temporary roads on completion of use.

9. Limit water quality impacts of prescribed fire by constructing water bars in firelines; not placing slash in drainage channels; maintaining the SMZ; and avoiding intense fires unless needed to meet silvicultural goals.

IV. STREAM CROSSING

A. <u>Legal Requirements</u>

1. Under the National Streambed and Land Preservation Act of 1975; PL310, any activity that would result in physical alteration or modification of a perennial stream, its bed or immediate bank must be approved in advance by the supervisors of the local conservation districts. Permanent or temporary stream crossing structures, fords, rip-rapping or other bank stabilization measures, and culverts installation on perennial streams are some of the forestry-related projects subject to 310 permits.

Before beginning such a project, the operator must submit a permit application to the conservation district indicating the location, description, and project plans. The evaluation generally includes on-site review, and the permitting process may take up to 60 days.

- 2. A short-term exemption from water quality standards may be required if construction activities will add sediment to surface water and thus violate water quality standards.
- 3. Stream-crossing projects initiated by federal, state, local agencies, or tribal government are subject to approval under the Fish, Wildlife and Parks 124 permit process, rather than the 310 permit.

B. DESIGN CONSIDERATIONS (310 permit required)

- 1. Cross streams at right angles to the main channel if practical. Adjust the road grade to reduce the concentration of water carried by drainage ditches to stream crossings. Direct drainage flow through an SZM and away from the stream crossing site.
- 2. Avoid unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-throughs on a stable, rocky portion of the stream channel.

C. INSTALLATION OF STREAM CROSSINGS (310 permit required)

- 1. Minimize stream channel disturbance and related sediment problems during construction of road and installation of stream crossing structures. Do not place erodible materials into stream channels. Remove stockpile material from high water zones. Locate temporary construction bypass roads in locations where the stream course will have minimal disturbance. Time construction activities to protect fisheries and water quality.
- 2. When using culverts to cross small streams, install those culverts to conform to the natural streambed and slope on all perennial streams and on intermittent

streams that support fish that provide seasonal fish passage. Place culverts slightly below normal stream grade to avoid culvert outfall barriers. Do not alter stream channels upstream from culverts, unless necessary to protect fill or to prevent culvert blockage.

- 3. Install culverts to prevent erosion of fill. Compact the fill material to prevent seepage and failure. Armor the inlet and/or outlet with rock or other suitable material where needed.
- 4. Consider dewatering stream crossing sites during culvert installation.
- 5. Use 1-foot minimum cover for culverts 18 to 36 inches in diameter, and a cover of one-third diameter for larger culverts to prevent crushing by traffic.
- 7. Use culverts with a minimum diameter of 15 inches for permanent stream crossings and cross drains.

V. WINTER LOGGING

A. GENERAL

- 1. Consider snow-road construction and winter harvesting when logging sites that are characterized by wet meadows, high-water tables, sensitive riparian conditions or other potentially significant erosion and compaction hazards.
- 2. Conduct winter logging operations when the ground is frozen or snow covered is adequate (generally more than one foot) to minimize site disturbance. Be prepared to suspend operations if conditions change rapidly and when the erosion hazard becomes high.
- 3. Consult with operators experienced in winter logging techniques.

B. ROAD CONSTRUCTION AND HARVEST CONSIDERATIONS

- 1. For road systems across areas of poor foundations, consider hauling only during frozen periods. During cold weather, plow any snow cover off of the roadway to facilitate deep freezing of the road grade prior to hauling.
- 2. Before logging, mark existing culvert locations. During and after logging, make sure that all culverts and ditches are open and functional.
- 3. Use compacted snow for roadbeds in unroaded, wet or sensitive sites. Conduct snow roads for single-entry harvests or for temporary roads.
- 4. Designate or mark all streams courses, including small streams, prior to snowfall. Conduct activities in streamside zones so the ground disturbance is minimized. Following completion of snow-road use, restore stream crossing to near pre-road conditions to prevent ice dams. Do not use stream channel for the roadway except for crossings.

- 5. Prior to falling in wet unfrozen soil areas, use tractors or skidders to compact the snow for skid road locations. Avoid steeper areas where frozen skid trails may be subject to erosion the next spring.
- 6. Return the following summer and build erosion barriers on any trails that are steep enough to erode.
- 8. Do not leave slash and tops in streams.

Section 501. BEAVER DAMS

I. BEAVER DAMS AND ROAD MAINTENANCE

(1) Except as needed for road maintenance, operators shall not remove beaver dams and other natural obstructions from waters of the Fort Belknap Indian Community during forestry or road operations without prior approval of the Fort Belknap Indian Community Council. Any beaver dam or other natural obstruction that is within 25 feet of a culvert shall be considered for removal as be needed for road maintenance.

A. RULE COMPLIANCE

This section is subject to enforcement action. Removal of any beaver dam or any other channel obstruction which is **greater than 25 feet** from a stream crossing **without first obtaining prior approval** is a **violation** and should be cited.

B. <u>ADMINISTRATION AND IMPLEMENTATION</u>

Other obstructions include debris in culverts, debris jams in streams, and landslide deposits. Operators may remove any jam or dam that is within 25 feet of a culvert (or stream crossing structure) without prior approval or notification, as this is considered routine road maintenance or emergency road construction. However, operators must obtain prior approval before removing any beaver dam or other obstruction which is further than 25 feet from a stream crossing structure.

Granting of prior approval shall be based on sections (2) and (3) of this rule.

II. BEAVER DAMS OR OTHER NATURAL OBSTRUCTIONS

- (2) Prior approval for removal of a beaver dam or obstruction may be granted if:
 - a. A beaver dam or obstruction threatens existing forests or roads; or
 - b. Beaver dam removal is part of a beaver population control approval by the Fort Belknap Indian Community Council; or
 - c. Retaining the beaver dam or obstruction would result in greater environmental harm than benefit.

A. RULE COMPLIANCE

This section not is subject to enforcement action.

B. <u>ADMINISTRATION AND IMPLEMENTATION</u>

This section provides guidance to the Fort Belknap Indian Community Council on granting prior approval for removal of beaver dams or other natural obstructions. Prior approval should not be granted unless there is clear potential for **significant** stand or stream damage associated with leaving the beaver dam or other obstruction and this damage will cause by flooding.

- Subsection (a) applies only to water damage, and not beavers eating trees.
- Consult the Fort Belknap Indian Community Council on potential environmental damage from beaver dams.

III. BEAVER DAMS AND SEDIMENT RELEASES

(3) Sediment releases and downstream channel scouring can occur when beaver dams are removed. Operators are encouraged to use techniques that result in a gradual release of water when a dam is removed.

A. RULE COMPLIANCE

This section is not subject to enforcement action.

B. ADMINISTRATION AND IMPLEMENTATION

This section provides guidance to a department or operator on methods for beaver dam removal to protect water quality.

If a department or operator encounters a situation where a large volume of water is stored behind a beaver dam or natural obstruction, the department or operator should consult with the Fort Belknap Environmental Department after informing the landowner of the problem. If prior approval is required, do not allow the operator to rapidly drain the obstruction without first consulting Fort Belknap Indian Community Council.

• Methods that should be avoided include blowing up the dam with explosives or using other methods that would "pull the plug" quickly. Methods that could be used include removal when the dam is empty, pumping, siphoning, constructing a spillway that does not outlet onto steep fill material.

IV. BEAVER DAMS AND ALTERNATIVE METHODS

(4) Alternative methods prior to removal of beaver dams or natural obstructions.

A. RULE COMPLIANCE

This section is not subject to enforcement action.

B. ADMINISTRATION AND IMPLEMENTATION

This section provides guidance to a department or operator on methods for alternative beaver dam control to protect water quality.

If a department or operator encounters a situation where a large volume of water is stored behind a beaver dam or obstruction, the department or operator should consult with the Fort Belknap Environmental Department after informing the landowner of the problem. If prior approval is required, determine if beaver dam or natural obstruction is beneficiary to stream ecology, aquatic life and wildlife habitat. Before removal see alternative methods beginning on page 29.

(Alternative Methods Figures 1-6, page 29)

Section 601. <u>HAZARDOUS SUBSTANCES</u>

A. GENERAL

- 1. Know and comply with regulations governing the storage, handling, application (including licensing of applicators), and disposal of hazardous substances.
- 2. Do not transport, handle, store, load apply or dispose of any hazardous substance or fertilizer in such manner as to pollute water supplies or waterways, or cause damage or injury to land, including humans, desirable plants and animals.
- 3. Do not store, mix or rinse hazardous below the high-water mark or where they might enter tribal waters.
- 4. Develop a contingency plan for hazardous substance spills, including clean up procedures.

B. PESTICIDE AND HERBICIDE

- 1. Use preventative measures with chemicals, for an integrated approach to weed and pest control, including manual, biological, mechanical control measures.
- 2. To prevent the entry of hazardous substances into surface waters:
 - a. Chemical treatments within the SMZ shall be by hand and shall be applied only to specific targets.
 - b. Leave a 25 foot buffer along surface waters when chemicals are being applied through ground application with power equipment.
 - c. For aerial application, leave at least a 50 foot buffer along live water and do not spray in the SMZ.
 - d. Always refer to chemical label instructions for additional guidance on use near water and required buffer zones.
- 3. To enhance effectiveness and prevent transport into stream, apply chemicals during appropriate weather conditions (see Section 501: PESTICIDE RULING, A. Label Statement Guidance).

PESTICIDE RULING

LABEL STATEMENTS FOR SPRAY APPLICATION

The Fort Belknap Indian Community Council (FBICC) has developed a set of labeling statements as guidance for use on agricultural, home lawn and garden, and other outdoor use product labels. FBICC considers these statements to be generally appropriate for all pesticides affected by this code. These mitigation measures generally can be implemented for most products, regardless of the active ingredient and formulation chemistry. However, FBICC acknowledges that this guidance may not be appropriate for all products and their uses and that for certain products there may be exceptions to the wording of these statements in which some part(s) should not apply and/or other wording may be more appropriate. For example, while this code applies to bio-pesticides applied as sprays or dusts, label statements will be determined on a case-by-case basis due to their usual low risk characteristics.

A. Label Statement Guidance

1. Products Applied as Sprays--All Affected Products, Except Home and Garden Products:

"Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use _____ (registrant to fill in blank with spray quality, e.g. fine or medium) or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 -- 10 mph as measured by an anemometer. Use _____ (registrant to fill in blank with spray quality, e.g. fine or medium) or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

For overhead chemigation, apply only when wind speed is 10 mph or less.

The applicator also must use all other measures necessary to control drift."

2. Products Applied as Dusts--All Affected Products, Except Home and Garden Products:

"Do not allow dust to drift from the application site and contact people, structures people occupy at any time and the associated property, parks

and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground rig applications, apply product no more than 4 feet above the ground or the crop canopy and only when wind speed is 10 mph or less at the application site as measured by an anemometer.

For aerial applications, use upwind swath displacement and apply only when wind speed is 3 -- 10 mph as measured by an anemometer. If application includes a no-spray zone, do not release dust at a height greater than 10 feet above the ground or the crop canopy.

The applicator also must use all other measures necessary to control drift."

3. Hand-applied Products, Including Home and Garden Products, to be Applied as Sprays or Dusts:

"Do not allow spray (or dust) to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. Apply only when wind speed is not more than 10 mph. For sprays, apply largest size droplets possible."

B. Possible Additional Product-Specific Labeling

Other labeling statements may be appropriate for certain products depending on the potential risks from the labeled uses to humans, plants, and wildlife or contamination of surface water. FBICC will consider the available information on a pesticide's incident history, current uses, and estimated exposures and risks, including estimates of deposition from available models, to determine the need for additional drift mitigation measures. Examples of such measures include limiting application height, spray quality (droplet size), use of no-spray zones, and prohibition of an application method.

If FBICC determines that a no-spray zone is necessary for a product, the following label statement will be used:

"Do not apply this product within	_ (distance to be determined) of _	(sensitive
areas to be determined for the product).	Under no circumstances apply this p	roduct within
(distance to be determined) of peo	ople or these areas."	

FBICC may find that the addition of no-spray zones to the above labeling statements is prudent as an additional drift management tool for applicators to protect people and sensitive areas from drift. FBICC in its risk management decisions will determine whether one or more no-spray zones and their distance(s) are necessary for products using available information about the pesticide's uses and risk assessments.

Section 701: Emergencies

(a.) The provisions of this Ordinance do not apply to emergency actions which are necessary to safeguard life or property during periods of immediate and

- substantial endangerment to life or property. The responsible person for the project shall notify the Administrative Review Board in writing within fifteen days of the action taken as a result of an emergency and provide a copy of action taken to the Environmental Department Office.
- (b.) The Administrator shall make an on-site inspection of an action and cause a written report of such observations to be filed with the Environmental Department Office, with a copy to the responsible person. The report shall include:
 - (1) A finding as to whether an emergency situation existed at the time the action was taken:
 - (2) A finding as to whether the action required a permit;
 - (3) Any recommendations for a permanent solution.
- (c.) The responsible person shall implement any proposed permanent solution within a reasonable time period recommended by the Administrator.

Section 801: Enforcement

- (a.) Violations. The following actions shall constitute an act of non-compliance with this Ordinance:
 - (1) Commencement or initiation of a project by the owner or a contractor without the owner first obtaining a permit;
 - (2) Continuation of work on an un-permitted project;
 - (3) Failure to comply with the terms or conditions of a permit;
 - (4) Failure to comply with the terms and conditions of this Ordinance and any regulations promulgated under this Ordinance;
 - (5) Failure to comply with orders of the Administrator.
- (b) Notice of Non-Compliance. When the Administrator has reason to believe that a violation of this Ordinance, any regulations adopted to implement this Ordinance or any permit issued under pursuant to this Ordinance has occurred, a Notice of Non-Compliance shall be issued. The Notice shall specify: (1) the nature of the violation, (2) the method and time for cure, if any, and (3) the type and amount of fine or penalty being assessed, if any, and (4) that the person to whom the Notice has been sent may appeal to the Appeals Board within fifteen days of the date of the Notice. The Notice of

Non-Compliance shall be served personally or by Certified Mail, Return Receipt Requested.

- (c) Curative Measures. If the person to whom the Notice has been sent agrees to undertake the curative measures specified in the Notice or otherwise approved by the Administrator, and the curative measures are completed within a reasonable time and to the satisfaction of the Administrator, no further proceedings shall be held and no fine or no penalty shall be assessed.
- (d) Hearing before the Appeals Board. An Appeals Board made up of the managers of the Fort Belknap Environmental Department, the Fort Belknap Fish and Game Department, the Fort Belknap Planning Department, and the Fort Belknap Natural Resources (Land) Department shall hear all appeals of the Notice of Non-Compliance. Any final decision or order of the Appeals Board may be appealed to the Fort Belknap Tribal Court within thirty days of the date of the decision or order.

Section 901: Penalty for Violation

- (a) Upon a finding by the Administrator that a violation has occurred, the Administrator may:
 - (1) revoke the applicable permit;
 - (2) order that the project be removed and the underlying property be restored; and/or
 - (3) prescribe such other remedial measures as may be appropriate.

The imposition of any one of the above remedies shall not preclude the imposition if any of the other remedies, or the imposition of the fine provided for in sub-section c.

- (b) In the event the Administrator orders that a project be removed and the underlying property restored, the Administrator shall specify a time period within which such action must be taken. If the person responsible for the project does not comply with the Administrator's order, the Administrator shall take steps to remove the project and restore the land, and the owner of the project shall be assessed the cost of such work. The Administrator shall notify the responsible person by mail at least five days in advance of removal of the project and any necessary restoration.
- (c) The Administrator may levy a fine not to exceed \$25,000.00 for each separate violation. Each day during which an act of non-compliance shall continue and during which an adequate attempt to comply is not made, shall be considered a separate violations.

Section 1001: Actions to Enforce

The Administrator may institute an action in Tribal Court to enforce this Ordinance, including actions to collect against any person who has been ordered to pay a penalty or perform remedial measures and who has not appealed such decision or who has not paid an assessed fee, cost or penalty. The Administrator may also pursue any other remedies that may be available under applicable tribal laws.

Section 1101: Effective Date (January 7, 2003)

This Ordinance shall become effective upon adoption and approval of the Fort Belknap Community Council (*Approved January 7, 2003*). This Ordinance shall not apply to existing projects except to the extent that it is shown that the project is failing or is technically inadequate or that it has a substantial detrimental impact on Tribal Waters.

Section 1201: Explanation of Regulations

Section 101 of the Clean Water Act (CWA), established goals for the attainment of good water quality.

Section 303, states are required to develop and implement water quality standards for all waters of the U.S. including wetlands. In the absence of wetland standards, water quality standards established for surface waters, apply to wetlands as well. While water quality standards can help protect preserved wetlands, such standards provide no direct means to avert or discourage the elimination of wetlands.

Section 319 establishes a national program for control of non-point source pollution including wetlands. Section 319 uses financial incentives to encourage voluntary state prioritization and protection of wetlands, but provides no regulatory wetlands protection.

Section 402 of the CWA-Section 402 (p), which established the National Pollutant Discharge Elimination System program (NPDES). While the NPDES program does not regulate activities conducted in wetlands nor the destruction of wetlands in any direct way, it's goal is to reduce pollutant discharges that may otherwise degrade wetlands from a water quality standpoint (USEPA 1995).

Section 404 of the CWA is needed if a proposed project will result in the discharge or placement of dredged or fill material into the waters of the United States, including wetlands. Agriculture has been a major cause of past wetland losses, however, the 1995 & 1990 Farm Bills have attempted to fill this gap in coverage.

Swampbuster provision of the 1985 & 1990 Farm Bills to address the significant agriculture has played in the alteration and loss of wetlands, the food security act (Farm Bill) of 1985 included two major wetland provisions "Swampbuster" and the Conservation Reserve Program (CRP). Swampbuster provision requires withholding of all USDA program benefits from any person who converts wetland for agricultural commodities that was converted after December 23, 1985 or converts a wetland for

agricultural commodity production after November 28, 1990, even if a crop is not planted. Benefits that can be lost thru Swampbuster provision include commodity supports (oats, wheat), crop insurance, and disaster payments until wetland is restored or replaced.

Water Bank Act (WBA) is a federally operated incentive approach geared largely to agricultural wetland protection, similar to the CRP, but initiated long before it, with the 1970 passage of the WBA (16 U.S.C. 1301). The WBA is targeted to the Prairie Pothole Region, and offers 10-year easements on wetlands and adjacent areas. Landowners agree not to drain, fill, level, burn, or otherwise destroy wetlands and to maintain ground cover essential for the resting, breeding, or feeding of migratory waterfowl in exchange for annual payments. This act made a significant contribution to wetland protection than the WRP and the CRP.

Migratory Bird Hunting and Conservation Stamp Act / Small Wetland Acquisition Program (SWAP)- SWAP established under the Migratory Bird Hunting Conservation Stamp Act is the oldest and largest of the federal protection programs and is rooted in bird hunting interests. This program is similar to the Water Bank Program in which landowners give up their right s to drain, fill, burn, or level wetlands (GAO, 1991).

SWANNC Decision. In January 2001, the United States Supreme Court in Solid Waste Agency of Northern Cook County v. Army Corps of Engineers, known as SWANCC, invalidated the Corps' Migratory Bird Rule which the Corps had been using to assert authority over isolated, intrastate wetlands. In SWANCC, the Corps attempted to regulate activities taking place in ponds which had formed in pits originally used in a sand and gravel mining operation. Under Corps regulations, the definition of "waters of the United States" included waters "which are or could be used as habitat by birds protected by the Migratory Bird Treaty" or by other migratory birds crossing state lines. Migratory birds could potentially use the gravel pits in question in SWANCC, but the ponds were not adjacent to a navigable water or tributary. The Supreme Court ruled that the Corps' attempt to regulate such isolated waters exceeded their authority under the Clean Water Act. 3

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Jr. William C. Canby, <u>American Indian Law</u>. St. Paul, Minnesota. West Publishing Co. 1988.

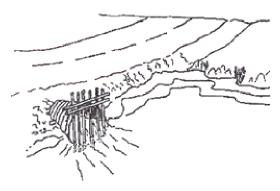
United States Government. <u>Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404 (b)(1) Guidelines.</u> 1990.

United States Government. <u>Treaties with the Gros-Ventre & Assiniboine Tribes of Montana 1851-1937.</u>

New York State. Bureau of Wildlife, Division of Wildlife and Marine Resources

SWANNC Decision. Recent court decision which does not protect isolated water of the United States. Solid Waste Agency of Northern Cook County vs. Army Corps of Engineers

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS FIGURE 1

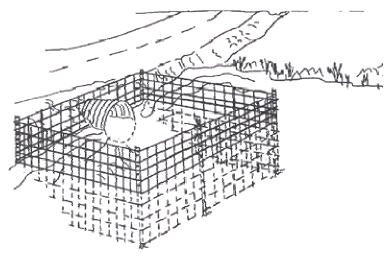


Pitchfork Guard

This device prevents beavers from building a dam inside a culvert. This is a preventive measure and not a water regulation device. If beavers build a dam in front of the culvert, other measures should be taken.

- 1/2"-3/4" metal rods spaced 6" apart and held together only at the top with horizontal rods.
- Held in place by the current and by driving the vertical rods into the bottom.
- Easier to remove than wire mesh because there are no horizontal bars to catch on deposited material.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS FIGURE 2



Deep-Water Fence

The purpose of the deepwater fence is to physically exclude beavers from plugging the intakes of road culverts and prevent them from detecting the flow of water into the culvert which can initiate dam building activity.

Installation Guidelines

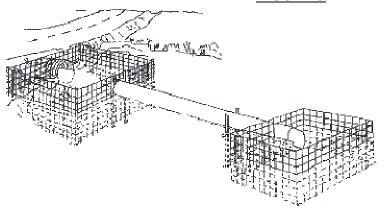
- 1. Beavers must be prevented from gaining access to the culvert by keeping the wire exclosures tight against the bottom and extending the wire 18-24 inches above the water level.
- 2. The exclosure must be of sufficient size so as to effectively eliminate the sensation of waterflow entering the culvert. If material is deposited on the wire and it becomes a temporary dam, the flow capacity of the exclosure must be at least equal to that of the road culvert.
- 3. A 10' x 10' area is generally adequate. Culverts with high flow may require larger exclosures. The larger the exclosure, the more effective it is in reducing the sensation of flow.
- 4. In areas with uneven bottoms, a floor may be added to prevent beavers from swimming underneath the exclosure.

Materials Needed

1. 6" x 6" mesh 60" wide concrete reinforcement wire (6 gauge) has been found to exclude beavers and still allow debris to pass through. This comes in 5' x 10' panels and in 60" wide rolls.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

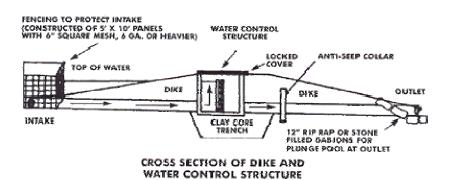
FIGURE 3



2. Heavy duty steel posts.

If beavers do begin to construct a dam against a fence installed to protect a culvert, it then may be necessary to install a WLCD to regulate the water level. The deep-water fence protecting the culvert will act as an emergency spillway during high run-off conditions when the WLCD cannot handle the flow. (Note: Road grades cannot usually be used as dikes. Deposited debris may have to be removed or modified.)

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS FIGURE 4



Modifying Sites to Discourage Beaver Occupation

Whenever possible, include beavers damage prevention, control techniques or structures in initial engineering plans. For instance, where it is feasible, trees and shrubs on the banks of streams and ditches should be removed. This eliminates material beavers might use to construct dams and/or utilize as a food source. This can be particularly effective along agricultural drainage ditches and immediately upstream and downstream of road culverts.

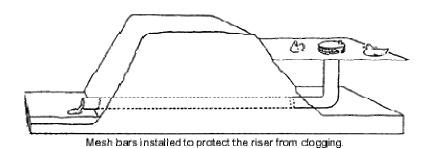
To make mowing easier, the banks of drainage ditches and man-made ponds should be gently sloped. This discourages beaver from burrowing and minimizes the probability of dam construction. (Note: Without an Article 24/15 Permit, it is a violation of The Environmental Conservation Law to disturb the bed or banks of any protected stream). Beaver activity can also be discouraged by eliminating pools and creating riffle areas leading into road culverts. This can be accomplished through mechanical grading and placement of coarse stone or rubble in the stream bed.

This prevents beavers from obtaining mud and/or from moving material to a site which they have previously dammed. Beaver are also less likely to construct dams in high gradient areas. Again, this is most effective when all vegetation is removed from the immediate area.

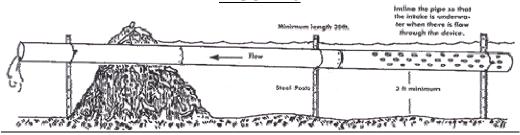
Beaver control technology should be incorporated into engineering designs for pond and marsh construction. In shallow water impoundments, dikes should be constructed with wide bases, gentle slopes, and be no higher than the top of the water control box. The control should be an in-line water control structure placed in the center of the dike or as far away from the intake as possible. The top of the box should be protected with a locked cover. Water levels should be maintained so that the intake remains completely under water. The intake should also be protected with a deep water cage or fence to prevent beaver or flood debris from plugging it. To facilitate mowing of the dike, the control box can be set at grade on the top of the dike.

The objectives of this design are two-fold. One is to construct a wide, low level dike which minimizes the washout potential. The other objective is to disguise the flow of water at the intake and protect the water control box from beaver activity.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS FIGURE 5



BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS FIGURE 6



Dam Installation of a Beaver Drain Tube

- 1. Pipe size and material can vary depending on flow requirements and the material available.
- 2. Soft pond bottoms will reduce the useful life of the tube. This WLCD lasts longer in ponds with gravel or hard clay.